



Attorney's Docket No. 4990 USA/W-C/W-C/JB1

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Patent Application of:	)	
Steven Verhaverbeke et al.	)	Examiner: Umez-Eronini, Lynette T.
Application No.: 09/891,730	)	Art Unit: 1765
Filed: June 25, 2001	)	
For: CLEANING METHOD AND SOLUTION	)	
FOR CLEANING A WAFER IN A	)	
<u>SINGLE WAFER PROCESS</u>	)	
Mail Stop RCE		
Commissioner for Patents		
P.O. Box 1450		
Alexandria, Virginia 22313-1450		

INFORMATION DISCLOSURE STATEMENT

Sir:

Enclosed is a copy of Information Disclosure Citation Form PTO-1449 or PTO/SB/08 together with copies of the documents cited on that form, except for copies not required to be submitted (e.g., copies of U.S. patents and U.S. published patent applications need not be enclosed for applications filed after June 30, 2003). It is respectfully requested that the cited documents be considered and that the enclosed copy of Information Disclosure Citation Form PTO-1449 or PTO/SB/08 be initialed by the Examiner to indicate such consideration and a copy thereof returned to applicant(s).

Pursuant to 37 C.F.R. § 1.97, the submission of this Information Disclosure Statement is not to be construed as a representation that a search

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage in an envelope addressed to Mail Stop RCE, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450 on July 22, 2004.  
(Date of Deposit)

Claire Walters  
(Typed or printed name of person mailing correspondence)  
Claire Walters 7/22/2004  
(Signature of person mailing correspondence)

has been made and is not to be construed as an admission that the information cited in this statement is material to patentability.

Pursuant to 37 C.F.R. § 1.97, this Information Disclosure Statement is being submitted under one of the following (as indicated by an "X" to the left of the appropriate paragraph):

  X   37 C.F.R. §1.97(b).

       37 C.F.R. §1.97(c). If so, then enclosed with this Information Disclosure Statement is one of the following:

       A statement pursuant to 37 C.F.R. §1.97(e) or

       A check for \$180.00 for the fee under 37 C.F.R. § 1.17(p).

       37 C.F.R. §1.97(d). If so, then enclosed with this Information Disclosure Statement are the following:


- (1) A statement pursuant to 37 C.F.R. §1.97(e); and
- (2) A check for \$180.00 for the fee under 37 C.F.R. §1.17(p) for submission of the Information Disclosure Statement.

If there are any additional charges, please charge Deposit Account No. 02-2666.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

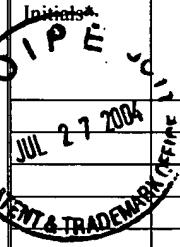
Dated: 7/22 2004

  
\_\_\_\_\_  
Heather M. Molleur  
Reg. No. 50,432

Patent Counsel  
Legal Affairs Dept.  
APPLIED MATERIALS, INC.  
P.O. Box 450A  
Santa Clara, CA 95052

Telephone inquiries to:  
Heather M. Molleur  
(408) 720-8300

Substitute for Form 1449/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> <i>(use as many sheets as necessary)</i>			<b>Complete if Known</b> Application Number: 09/891,730 Filing Date: June 25, 2001 First Named Inventor: Steven Verhaverbeke Art Unit: 1765 Examiner Name: Umez-Eronini, L. Attorney Docket Number: 4990 USA/W-C/W-C/JB1 BSTZ Docket No.: 4887.P447		
Sheet	1	of	2		

U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (If known)				
		US-	3,045,702	07-24-1962	Nakata	
		US-	3,291,347	12-13-1966	Blades	
		US-	4,243,071	01-06-1981	Shackelford	
		US-	4,554,050	11-19-1985	Minford et al.	
		US-	4,671,852	06-09-1987	Pyke	
		US-	4,899,767	02-13-1990	McConnell et al.	
		US-	5,071,547	12-10-1991	Cazer et al.	
		US-	5,134,445	07-28-1992	Toge	
		US-	5,302,311	04-12-1994	Sugihara et al.	
		US-	5,346,302	09-13-1994	Ryu	
		US-	5,466,389	11-14-1995	Ilardi et al.	
		US-	5,490,611	02-13-1996	Bernosky et al.	
		US-	5,678,116	10-14-1997	Sugimoto et al.	
		US-	5,853,491	12-29-1998	Schulz	
		US-	5,885,362	03-23-1999	Morinaga et al.	
		US-	5,908,509	06-01-1999	Olesen et al.	
		US-	5,938,847	08-17-1999	Akimoto et al.	
		US-	5,962,384	10-05-1999	Cooper et al.	
	US-	5,972,123	10-26-1999	Verhaverbeke		
	US-	6,132,522	10-17-2000	Verhaverbeke et al.		

FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup>	Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				
		EP	0 245 667 A1	11-19-1987	Edeleanu Gesellschaft mbH		No

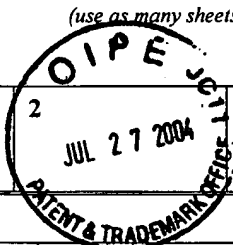
Examiner Signature		Date Considered	
--------------------	--	-----------------	--

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SENT FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Substitute for Form 1449/PTO <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> <i>(use as many sheets as necessary)</i>		<b>Complete if Known</b>	
		Application Number	09/891,730
		Filing Date	June 25, 2001
		First Named Inventor:	Steven Verhaverbeke
		Art Unit	1765
Examiner Name	Umez-Eronini, L.		
Sheet 2 of 2	Attorney Docket Number	4990 USA/W-C/W-C/JB1	
	BSTZ Docket No.	4887.P447	



### NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T <sup>2</sup>
		Chapter 3 – Silicon Wafer Cleaning Procedure, <a href="http://www-mtl.mit.edu/CAFE/sop_copy/rca.html">http://www-mtl.mit.edu/CAFE/sop_copy/rca.html</a> , 04/24/2002, 4 pages.	
		Patent Abstracts of Japan , Vol. 004, No. 089 (C-016), June 25, 1980 & JP 55 051427 A (Sakaoka Kazuhiko), April 15, 1980, 1 page.	
		Silicon VLSI Technology, Fundamentals, Practice and Modeling, By Plummer, Deal and Griffin, IC Manufacturing-Chapter 4, Semiconductor Manufacturing-Clean Rooms, Wafer Cleaning And Gettering- Chapter 4, ©2000 by Prentice Hall, Upper Saddle River, N.J., 16 pages.	
		Written Opinion for PCT/US/01/41160 mailed April 2, 2004, 7 pages.	
		2 <sup>nd</sup> Annual International SEMATECH Wafer Cleaning and Surface Preparation Workshop 2000, April 11-12, 2000, Hyatt Hotel, Austin, TX, 24 pages.	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

\*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>Applicant is to place a check mark here if English Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SENT FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.